

IN THE CLAIMS:

This is listing of claims will replace all prior versions, and listings, of claims in the patent application.

1. (Currently Amended) A method for controlling load in a telecommunication system including a network part, at least one subscriber terminal and a telecommunication connection between the network part and the subscriber terminal, the method comprising:

using the telecommunication connection for connection setup and data transfer, the telecommunication connection including a channel for relaying channel allocation requests transmitted by the subscriber terminal to the network part, and

controlling the telecommunication system load by adjusting the capacity of the channel used for relaying the channel [[a]] allocation requests.

2. (Previously Presented) A method as claimed in claim 1, further comprising decreasing channel capacity when a base station system becomes overloaded, and when the load drops to a desired level, increasing the channel capacity.

3. (Previously Presented) A method as claimed in claim 1, further comprising configuring a logical packet associated control channel PCCCH for the resource of a packet data channel PDCH including the telecommunication connection, the PDCH resource including a logical PCCCH channel divided into an uplink resource and downlink resource, the uplink resource being divided between packet random access channel PRACH, a packet data traffic channel PDTCH and a packet associated control channel PACCH, and

the uplink resource, which is not fixedly configured as the PRACH channel, being dynamically allocated to the PRACH, PDTCH and PACCH channels.

4. (Previously Presented) A method as claimed in claim 3, further comprising indicating a resource part to be allocated to the PRACH channel by means of the downlink resource of the PCCCH channel and by relaying uplink state flag information to a radio path in each downlink radio block of the PDCH resource included by the logical PCCCH channel, wherein

the uplink state flag information of the downlink radio block has a certain predetermined idle mode value, whereby the next uplink radio block in turn is used as the PRACH channel.

5. (Previously Presented) A method as claimed in claim 3, further comprising:

- indicating the resource part to be allocated to the PRACH channel by means of the PCCCH downlink resource, and
- relaying the uplink state flag information to the radio path in each downlink radio block of the PDCH resource included by the logical PCCCH channel, wherein
 - the uplink state flag information of the downlink radio block has another value than a certain predetermined idle mode value, and the uplink state flag information has such a value that the subscriber terminal is unable to use the channel as the PRACH channel.

6. (Previously Presented) A method as claimed in claim 3, further comprising:

- indicating the resource part to be allocated to the PRACH channel by means of the downlink resources of the PCCCH channel, and
- relaying the uplink state flag information to the radio path in each downlink radio block of the PDCH resource included by the logical PCCCH channel, wherein
 - the USF information of the downlink radio block has another value than a certain predetermined idle mode value, whereby the uplink packet traffic of the PDTCH and the PACCH channels of the subscriber terminal allocated to the PDCH resource concerned is controlled by the uplink state flag information, and the uplink state flag information has such a value that the subscriber terminal is unable to use the channel as the PRACH channel.

7. (Previously Presented) A method as claimed in claim 1, further comprising measuring continually the base station system's processor load or the signalling load between the base station and the base station controller.

8. (Previously Presented) A method as claimed in claim 1, wherein the method is utilized in the base station and/or the base station controller.

9. (Previously Presented) A method as claimed in claim 1, wherein the method is primarily employed in the base station and/or the base station controller, to which a high PRACH capacity is configured.

10. (Previously Presented) A telecommunication system comprising:
a network part,
at least one subscriber terminal, and
a telecommunication connection between the network part and the subscriber terminal, and wherein
a base station system is arranged to use the telecommunication connection for connection setup and data transfer,
the telecommunication connection includes a channel for relaying channel allocation requests transmitted by the subscriber terminal to the network part, and
the telecommunication system is arranged to control load by adjusting the capacity of the channel used for relaying the channel allocation requests.

11. (Previously Presented) A telecommunication system as claimed in claim 10, wherein when the base station system becomes overloaded, the telecommunication system is arranged to decrease PRACH channel capacity, and when the load drops to a desired level, the telecommunication system is arranged to increase the PRACH channel capacity.

12. (Previously Presented) A telecommunication system as claimed in claim 10, wherein the telecommunication system is arranged to configure a logical packet associated control channel PCCCH for the resource of a packet data channel PDCH comprised by the radio connection,

the PDCH resource includes a logical PCCCH channel divided into an uplink resource and downlink resource, the uplink resource being divided between the PRACH channel, a packet data traffic channel PDTCH and a packet associated control channel PACCH, and

the uplink resource, which is not fixedly configured as the PRACH channel, being dynamically allocated to the PRACH, PDTCH and PACCH channels.

13. (Previously Presented) A telecommunication system as claimed in claim 12, wherein the telecommunication system is arranged to indicate a resource part to be allocated to the PRACH channel by means of the downlink resource of the PCCCH channel,

the system is arranged to relay uplink state flag information to a radio path in each downlink radio block of the PDCH resource included by the logical PCCCH channel, and

the uplink state flag information of the downlink radio block has a certain predetermined idle mode value, whereby the telecommunication system is arranged to use the next uplink radio block in turn as the PRACH channel.

14. (Previously Presented) A telecommunication system as claimed in claim 12, wherein the system is arranged to indicate the resource part to be allocated to the PRACH channel by means of the downlink resources and to relay the uplink state flag information to the radio path in each downlink radio block of the PDCH resources included by the logical PCCCH channel,

the uplink stage flag information of the downlink radio block has another value than a certain predetermined idle mode value, and

the USF information has such a value that the subscriber terminal is unable to use the channel as the PRACH channel.

15. (Previously Presented) A telecommunication system as claimed in claim 12, wherein the system is arranged to indicate the resource part to be allocated to the PRACH channel by means of the downlink resource of the PCCCH channel, and arranged to relay the uplink state flag information to the radio path in each downlink radio block of the PDCH resource included by the logical PCCCH channel,

the downlink radio block uplink state flag information has another value than a certain predetermined idle mode value, whereby the telecommunication system is arranged to control the uplink packet traffic of the PDTCH and the PACCH channels of the subscriber terminal allocated to the PDCH resource concerned by the uplink state flag information, and

the uplink state flag information has such a value that the subscriber terminal is unable to use the channel as the PRACH channel.

16. (Currently Amended) A telecommunication system as claimed in claim 10, wherein the system is arranged to measure continually the base station system's processor load or the signalling signaling load between the base station and the base station controller.